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ONE HUNDRED SIXTH CONGRESS

# Congress of the United States

## House of Representatives

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January 28, 2000

### BY FACSIMILE

The Honorable Alexis Herman  
Secretary  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

Dear Madame Secretary:

I am writing to comment on the Occupational Safety and Health Administration's (OSHA's) proposed rule (NPRM) issued November 23, 1999, and entitled "Ergonomics Program; Proposed Rule" (64 FR 65768). My comments fall into four main sections: (1) questions regarding the premises and logic of OSHA's advocacy for an ergonomics standard; (2) questions regarding regulatory burdens; (3) questions regarding OSHA's rejection of less costly alternatives; and (4) recommendations. Besides questioning OSHA's justification for an ergonomics rule and OSHA's cost-benefit analysis, I offer less-costly alternatives for OSHA's consideration.

OSHA's own data show that the market is addressing the problem of workplace-related musculoskeletal disorders (MSDs). In addition, a major study commissioned by the Small Business Administration (SBA) concludes that the costs of the rule may significantly exceed the benefits, especially for small businesses. Therefore, OSHA should develop non-regulatory, incentive-based options for accelerating voluntary action to control MSD risk factors in the workplace. Specifically, OSHA should develop a proposal under which businesses can write off ("expense") the full costs of ergonomic engineering controls and equipment in the year such investments are made.

### **I. Questions Regarding OSHA's Premises and Logic**

#### ***Ergonomic Risk Factors in Historical Perspective***

Work-related MSDs are as old as time. Occupational tasks involving repetitive motions, awkward postures, bending, lifting, pulling, pushing, and physical exertion did not originate in

the microchip economy, nor even in the industrial age of assembly line production. Indeed, the phrase “backbreaking labor” is an all-too-accurate description of what work was like during most of recorded history, and what it is still like today for millions of people in developing countries.

During the past 100 years, world average life expectancy more than doubled, rising from 30 years in 1900 to a projected 63 years in 2000.<sup>1</sup> In the United States, average lifespan has increased from 47.3 years in 1900 to 76.5 years in 1997.<sup>2</sup> Such progress was due not only to improvements in nutrition and health care but also to increases in wealth and technological advances that dramatically transformed work, reducing the stress and hazards of economic endeavor.

As wealth and technology eliminate or alleviate the more obvious or life-threatening workplace risks, people naturally direct their attention to more subtle or quality-of-life-threatening risks -- for example, computer-related carpal tunnel syndrome, eye strain, and neck aches. Prudent measures should be taken to minimize those risks. However, we should not lose sight of the bigger picture. On balance, the computer has been a fantastic plus for American workers. It has created new and challenging occupations. It has increased the proportion and number of workers engaged in analytic, artistic, and engineering tasks, thereby decreasing the proportion and number engaged in hard physical toil. It has increased the productivity of labor and, thus, increased wages. It has created new leisure-time pursuits for workers and their families. It is expanding opportunities for men and women to work at home, enabling millions to avoid the stress and hazards of commuting. Most importantly, the computer has unleashed an economic dynamism that is enhancing society’s ability to feed the hungry, care for the sick, develop human resources, manage crises, and create jobs.

Every innovation carries risks. Usually, however, if an innovation is market-driven, it is safer than the work practices or technologies it replaced. Moreover, as the risks of the innovation become known, the market typically takes corrective action. There is now a booming ergonomics consulting industry. Profit-seeking private companies are producing ergonomically-designed keyboards and even voice-activated computers. No doubt these innovations carry risks of their own. Imagine the repetitive stress on sensitive vocal chords, if, instead of typing the ergonomics rule, OSHA employees “talked” the rule into a computer!

Strictly speaking, there are no “safe” work practices or technologies, only *safer* ones. Human societies progress as risky innovations replace older practices and technologies that are

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<sup>1</sup>Nicholas Eberstadt, “World Population Prospects for the Twenty-First Century: The Specter of ‘Depopulation’?” in Competitive Enterprise Institute, Ron Bailey, ed., *Earth Report 2000* (New York: McGraw-Hill, 2000), p. 63.

<sup>2</sup>Centers for Disease Control and Prevention, *United States Life Tables, 1997* (National Vital Statistics Reports, Volume 47, Number 28, December 13, 1999), pp. 32-33.

even less safe. Newer is not always better; but, in general, innovations that survive the test of market competition are better (including cleaner, healthier, and safer) than yesterday's products or methods. There are risks of under-regulation but also of over-regulation. There comes a point beyond which regulation becomes a net burden on economic and social progress. I am concerned that OSHA recognizes no stopping point or limit to its regulatory pursuit of a "safe" workplace.

### ***OSHA Has Not Demonstrated Significant Market Failure***

In a document entitled "Economic Analysis of Federal Regulations Under Executive Order 12866,"<sup>3</sup> the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget (OMB) set forth the results of an exhaustive 2-year effort to describe "best practices" for preparing the economic analysis of a significant regulatory action, such as OSHA's proposed ergonomics rule. The substantive part of the OIRA document begins as follows: "In order to establish the need for the proposed action, the analysis should discuss whether the problem constitutes a significant market failure." Although the proposed rule assumes and implies in several places that MSD hazards constitute a significant market failure, there is no explicit discussion of this threshold question. On the other hand, the proposed rule contains considerable evidence that the market's response to workplace MSD risks has been remarkable in speed and scope.<sup>4</sup>

OSHA gives the impression that MSDs have reached epidemic proportions -- hence that the market is failing to assure the safety of American workers. OSHA states that, "Since 1993, the first year BLS [Bureau of Labor Statistics] began reporting data on musculoskeletal disorders, private industry employers have reported more than 620,000 MSDs every year that have been serious enough to result in days away from work for the employee." According to OSHA, MSDs "now account for one-third of all LWD [lost workday] injuries and illnesses." OSHA estimates that, each year, MSDs cost companies \$15-20 billion in workers' compensation costs -- "roughly \$1 of every \$3 spent for workers' compensation."<sup>5</sup> However, OSHA neglects to mention several facts that put such numbers in a less alarming light.

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<sup>3</sup>[www.whitehouse.gov/OMB/infor/riaguide.html](http://www.whitehouse.gov/OMB/infor/riaguide.html).

<sup>4</sup>Susan E. Dudley and Diana Rowen, "Overstressing Business: OSHA and Ergonomics," *Briefly . . . Perspectives on Legislation, Litigation, and Regulation* (National Legal Center for the Public Interest/Regulatory Studies Program, Mercatus Center, George Mason University), Volume 3, Number 10, October 1999, p. 15.

<sup>5</sup>Ergonomics NPRM, p. 65776.

First, 620,000 lost workday injuries sounds like a lot, but it represents considerably less than 1 percent of all employees in the private sector workplace.<sup>6</sup> In any given year, more than 99 out of 100 workers do not suffer repetitive motion injuries serious enough to result in lost work days.

Second, OSHA includes lower back pain in the category of MSDs. Many backaches and injuries are the result of a single event, or non-work-related factors, rather than repetitive motions or improper workplace design. Eighty percent of Americans have back pain at some point in their lives, and 60 percent of adults experience back pain in any given year.<sup>7</sup> Therefore, a large percentage of MSDs included in OSHA's total are probably due to non-work-related factors.

Third, there is no good reason to assume that MSD rates are higher today than in 1980, 1960, or 1940. Former Assistant Secretary of Labor Joseph A. Dear warns that MSD rates are increasing. In testimony before my Subcommittee, Mr. Dear asked: "If that [market forces] really worked, then how can you explain an increase in repetitive motion disorders reported by employers to the Bureau of Labor Statistics, from 22,000 in 1981 to 300,000 in 1993? I mean, something is not working."<sup>8</sup> However, the reported increase in MSDs may well be the result of changes in OSHA policy rather than changes in the workplace. In 1985, OSHA, in its guidance documents and communications with companies, began urging employers to treat MSDs as reportable injuries.<sup>9</sup> In 1987, OSHA began prosecuting employers for ergonomics hazards under the General Duty Clause of the Occupational Safety and Health (OSH) Act,<sup>10</sup> creating an even stronger incentive for employers to record and report repetitive stress injuries. Mr. Dear's numbers are more likely an artifact of OSHA's policies than a consequence of deteriorating conditions in the workplace.

OSHA's own data also suggest that workplaces are becoming safer, not more hazardous. For example, total injuries and illnesses per 100 full-time workers fell from 11.0 in 1973 to 6.7 in

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<sup>6</sup>Testimony of David G. Savardi, Hearing on OSHA's Regulatory Activities and Practices Regarding Ergonomics, July 12, 1995, (U.S. Government Printing Office: 1997), p. 138. According to the Bureau of Labor Statistics (BLS), 131.4 million Americans were employed in the civilian workforce in 1998. See "Comparative Civilian Labor Force Statistics, Ten Countries, 1959-1998," [www.dol.gov/ftp.bls.gov/pub/special.requests/ForeignLabor/flslforc.txt](http://www.dol.gov/ftp.bls.gov/pub/special.requests/ForeignLabor/flslforc.txt).

<sup>7</sup>Dudley & Rowen, p. 5.

<sup>8</sup>Hearing on OSHA's Regulatory Activities and Practices Regarding Ergonomics, July 12, 1995, p. 48.

<sup>9</sup>Savardi, p. 138.

<sup>10</sup>Dudley & Rowen, p. 7.

1998.<sup>11</sup> Fatal workplace injuries per 100,000 full-time workers fell from 4,970 in 1974 to 2,800 in 1991.<sup>12</sup> Are we to suppose that as workplaces in general are becoming healthier and safer, workplace MSD hazards are increasing? That supposition is counterintuitive, to say the least.

Reported lost workday MSDs actually declined from 647,000 in 1996 to 626,000 in 1997, the last year for which data are available.<sup>13</sup> In fact, reported MSDs have declined each year since 1994.<sup>14</sup> The bottom line, though, is that reliable historical data do not go back far enough to determine whether ergonomic risk factors in the workplace are increasing or declining.

None of this is to suggest that MSDs are not real, painful, or even devastating to people who experience them. But, the growing popularity of ergonomics does not necessarily mean that work is becoming more dangerous. On the contrary, as lethal hazards are eliminated from the workplace, and as durable prosperity raises the salience of “quality of life” issues, it is only natural that businesses and policy makers become more concerned about risks once considered inseparable from work itself.

### ***The Market Is Responding***

OSHA contends that ergonomic interventions to eliminate and reduce MSD hazards in the workplace are cost-effective and, thus, beneficial to employer and employee alike. According to OSHA, ergonomics programs pay for themselves by lowering workers’ compensation payments, increasing productivity, and boosting employee morale.<sup>15</sup> But, if ergonomic redesign and management of the workplace is good for business, what need is there for an ergonomics mandate? Why not rely on market forces to spread ergonomic practices in the American workplace? OSHA’s own data show significant market penetration of ergonomic practices:

Results from OSHA’s ergonomics survey (OSHA survey, 1993) show that only 28 percent of firms with fewer than 20 employees have analyzed their jobs for risk factors, while fully 80 percent of establishments with 250 or more employees, i.e., the largest firms and those most likely to self-insure, have done so. The same pattern holds for following through on these job analyses: 76 percent of the largest establishments have

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<sup>11</sup>OSHA, Occupational Injury & Illness Rates per 100 Full-Time Workers 1973-98, [www.osha.gov/oshstats/bltable.html](http://www.osha.gov/oshstats/bltable.html).

<sup>12</sup>OSHA, Fatal Workplace Injuries, [www.osha.gov.oshstats/privbl.html](http://www.osha.gov.oshstats/privbl.html).

<sup>13</sup>NPRM, p. 65985; Dudley & Rown, p. 7.

<sup>14</sup>Dudley & Rowen, citing BLS data, p. 16.

<sup>15</sup>NPRM, p. 66010.

implemented at least some engineering controls to reduce risk factors, while only 23 percent of firms with fewer than 20 employees have done so.<sup>16</sup>

What this means is that, in 1993, “50% of general industry employees worked in establishments that have ergonomics programs.”<sup>17</sup> That is a high degree of market penetration, especially considering that ergonomics is a discipline of recent vintage.

OSHA’s impatience with market outcomes is simply unjustified. OSHA’s Training Institute did not offer its first course in ergonomics until 1983. OSHA did not begin its first pilot program to reduce back injuries using the National Institute for Occupational Safety and Health’s (NIOSH’s) “Work Practice Guide to Manual Lifting” until 1986. OSHA did not publish its “Ergonomics Program Management Guidelines for Meatpacking Plants” or create an Office of Ergonomics Support until 1990. OSHA did not hold major regional ergonomics conferences or establish an ergonomics web site until 1997.<sup>18</sup> In light of these facts, what is surprising and important is not that 78 percent of small firms do not have ergonomic workplace controls but that 22 percent do. Seventy-six percent of large establishments have implemented some form of ergonomics controls. By what reasonable metric or criterion does that constitute market failure?

Note also that OSHA’s estimates are based on a 1993 survey. That survey preceded by four years OSHA’s regional ergonomics conferences and ergonomics website. OSHA even opines that the percentage of employees covered by ergonomics programs “has grown since that time.”<sup>19</sup>

OSHA’s error goes deeper than a misreading of its own data. OSHA appears to assume that, if a company has not “implemented engineering controls to reduce ergonomic risk factors,” then the company’s employees enjoy no protection from MSD hazards. That view betrays a fundamental misunderstanding of market processes. If three-quarters of large companies implement ergonomic controls, that sends a huge market signal to manufacturers of industrial machines and office equipment to increase production and marketing of ergonomically-designed products. A company purchasing such products will effectively protect its employees, even if it has no ergonomics program and implements no engineering controls.

The market is fundamentally a discovery process. If a management innovation solves real problems at reasonable cost, it will be copied widely. As the niche market for the innovation becomes a mass market, the costs of implementing the innovation decline. Eventually, if the

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<sup>16</sup>NPRM, p. 66044

<sup>17</sup>NRPM, p. 66001.

<sup>18</sup>NPRM, p. 65771.

<sup>19</sup>NPRM, p. 66001.

idea is truly sound, it becomes common practice, even in small establishments. OSHA's determination to establish a nationwide ergonomics regime by regulatory fiat raises questions about OSHA's confidence in the intrinsic merits of its policies.

A final point worth mentioning is that many ergonomic hazards will diminish and disappear over time as a natural consequence of technological progress. The digital economy is accelerating the long-term trend of industrial civilization to reduce the intensity and quantity of human physical exertion required for production and exchange. Thus, without any deliberate ergonomic intervention by either government officials or business managers, it is likely that some of today's MSD risk factors will be less potent or absent in the workplace of tomorrow.

## II. Questions Regarding Regulatory Burdens

### *The Chosen Alternative Is a License to Micromanage Business*

OSHA's economic analysis of the costs and benefits of the proposed rule assumes that an employer's obligations under the rule are clear and well defined. In fact, those obligations are likely to be quite open-ended, with no clear limit on how much employers must do or spend.

Under the proposed rule, any firm with employees engaged in "manual handling" or "manufacturing" jobs must set up the "Basic Program." The Basic Program has two components: (1) management leadership and employee participation; and (2) hazard identification and information. To meet the requirements of the Basic Program, employers must set up a management and communication structure to address MSD hazards, provide training and resources for supervisors and employees, communicate "periodically" with employees about the program, and evaluate employee reports of MSD signs and symptoms.<sup>20</sup> OSHA's definition of "manual handling jobs" includes jobs "where manual handling [e.g., pulling, pushing, lifting, loading, moving, warehousing, stocking] is a regular element of the job cycle." As Policy Planning & Evaluation, Inc. (PP&E) points out in a recent report prepared for the SBA, it is not always clear whether a particular task is or is not a "regular" part of an employee's job:

Would ½ hour devoted each day to manual handling by one employee force the company to institute the Basic program? In many establishments, especially small businesses, employees are required to be versatile. Spending ½ hour on manual handling by at least one employee in a small establishment such as a book or shoe store, is not that unusual. Thus, depending on the interpretation of "regular part," the proposed rule may cover a much larger number of establishments [than OSHA estimates].<sup>21</sup>

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<sup>20</sup>NPRM, pp. 65795-65802.

<sup>21</sup>Policy Planning & Evaluation, Inc., *Analysis of OSHA's Data Underlying the Proposed Ergonomics Standard And Possible Alternatives Discussed by the SBREFA Panel 3/2/99* -

One can easily envision situations where OSHA and an employer disagree on whether manual handling constitutes a "regular" portion of an employee's job and, thus, whether the employer is obligated to implement the Basic Program. If OSHA interprets "regular" expansively, the frequency of OSHA inspections and citations, particularly of small business, could increase dramatically. Would a half-hour per day of manual handling by one employee in a small business be enough to trigger the Basic Program requirements? How about a half-hour per day three times a week -- or only once a week? Without further clarification by OSHA, the rule could easily function as a "gotcha," herding millions of small businesses into the Basic Program, regardless of the actual risks faced by their employees.

Under OSHA's chosen alternative, any firm with a single employee who experiences an MSD must implement the "Full" ergonomics program. The employer must analyze and control the "problem" job (i.e., the job held by the injured employee and other jobs in the workplace that involve the same physical work activities), train affected employees and their supervisors, and evaluate the program at least every three years.<sup>22</sup> Employers are allowed to use any combination of engineering, administrative, or work-practice controls to eliminate or reduce ergonomic risk factors in the workplace. However, engineering controls (i.e., workplace redesign) "are always the control method of choice, because they eliminate the hazard at its source."<sup>23</sup>

The employer must also provide prompt "MSD management" at no charge to the employee. MSD management includes "work restriction protections" for employees with MSDs. If a health care professional recommends that the employee take time off from work, the employer must pay 90 percent of wages and full benefits, for up to six months. Similarly, if a health care professional recommends that the employee work on a reduced schedule, the employer must pay 100 percent of wages and full benefits, for up to six months. I find it hard to believe that such an obligation would not bankrupt and destroy some small firms.

In any case, OSHA's proposed rule is fraught with opportunities for OSHA to micromanage business. First, MSDs encompass an immense variety of conditions, many of them unverifiable. Nonetheless, an employer must implement the Full ergonomics program whenever an MSD occurs. As one study observes:

The addition of the term "disorders" to "injuries" is deliberate and artful. "Disorders" is intended to sweep in conditions that cannot be identified by any medical tests, that are subjective, and that are often transitory. OSHA defines as "signs" of MSDs such objective criteria as decreased range of motion, loss of function, deformity, and decreased

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4/30/99, September 22, 1999, p. 13 (hereafter cited as PP&E).

<sup>22</sup>NPRM, p. 65986.

<sup>23</sup>NPRM, p. 66001.



grip strength. It defines as “symptoms” of MSDs such subjective phenomena as pain, tingling, stiffness, numbness, cramping, or burning. In OSHA’s view, any report of either a sign or a symptom in connection with any job by any worker should be sufficient to start the regulatory machinery in motion.<sup>24</sup>

Most people experience aches and pains at various points in life. OSHA recognizes that MSDs may be caused, partly or entirely, by non-work-related factors.<sup>25</sup> Nonetheless, under OSHA’s proposed rule, employers must “control” not only those workplace activities that “cause” MSDs but also those that “contribute to” MSDs or “aggravate a pre-existing MSD.” Any disgruntled employee could attempt to disrupt the workplace just by claiming to have MSD symptoms, or by blaming his employer for MSDs originating outside the workplace. The ensuing contention and confusion over what is and what is not a work-related MSD could furnish numerous occasions for OSHA inspections, enforcement actions, and employee grievance actions.

A second problem is the lack of end points or clear criteria for determining when an employer has fulfilled his obligations. OSHA is an enthusiastic proponent of ergonomic “solutions.” But even OSHA admits that most ergonomic fixes are not 100 percent effective.<sup>26</sup> For example, in shoe manufacturing, installing armrests and footrests, elevation and tilt equipment, better designed chairs, and pallet levelers to minimize bending while lifting reduced the “number of damaging wrist motions in assembly jobs by one-third,” reduced “disc compression forces in clerical jobs by about 17 percent,” and reduced “disc compression forces during lifting jobs by more than 50 percent.”<sup>27</sup> Such workstation modifications undoubtedly reduce the risk of MSDs. But, suppose another MSD occurs after the employer has implemented those changes. What is the employer’s obligation? Must he experiment with more engineering options? Must he slow the pace of work, or implement a job rotation system?<sup>28</sup> How practical would that be in a small establishment? What if the only way to eliminate damaging wrist motions and disc compression forces is to eliminate the jobs that require wrist flexion and bending while lifting?

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<sup>24</sup>Dudley & Rowen, p. 4.

<sup>25</sup>NPRM, p. 65927.

<sup>26</sup>NPRM, p. 65950, note 4: “Note that even if all of the work-related risk is eliminated, the effectiveness of the ergonomic interventions is still less than 100 percent because of the presence of background illnesses.”

<sup>27</sup>NPRM, p. 65946.

<sup>28</sup>The answer appears to be “yes.” Here is the regulatory language: “[Y]ou must continue this incremental abatement process if other feasible controls are available” (1910.922(c)).

An employer can only guess when his efforts to reduce MSDs are adequate in OSHA's eyes, because the rule contains no outcome performance measures or benchmarks. Reducing MSDs by 50 percent or even 70 percent below current levels is no guarantee that an employer has done enough. Nor is it clear that reducing MSDs 50-70 percent below national average rates for particular kinds of jobs assures compliance with the rule. As long as MSDs occur, an employer remains vulnerable to legal challenge by his employees and OSHA. Yet eliminating all MSDs is beyond any employer's technical and financial resources. To say nothing of the fact that ergonomic "science" is still in its infancy, many MSDs are caused or aggravated by activities -- sports, yard work, a second job -- that may be completely outside an employer's control. The proposed rule thus gives OSHA an open-ended pretext to inspect, cite, and prosecute American companies.

### *Questionable Economic Analysis*

OSHA estimates that the direct costs associated with each MSD, including lost productivity, lost tax payments, and administrative costs for workers' compensation claims, are \$22,546 per MSD. Multiplying this figure by the projected number of MSDs avoided, OSHA calculates that the proposed ergonomics rule will generate \$9.1 billion per year in annualized benefits during the first ten years of the program.<sup>29</sup> OSHA estimates that the annualized costs of the proposed rule are considerably smaller -- \$3.4 billion.

Not all economists share OSHA's rosy expectations. As noted earlier, at the recommendation of a health care professional, an employee with an MSD may work less and collect 100 percent of wages at full benefits for up to six months, or take time off from work and collect 90 percent of wages and full benefits for up to six months. PP&E, in a study prepared for SBA, estimates that the ergonomic rule's cost could jump to \$8.45 billion just due to the reclassification of injuries that would occur as workers respond to the incentives created by the rule's generous work restriction provisions.<sup>30</sup>

PP&E also contends that OSHA underestimates the number of firms required to implement the Basic Program, the time required to set up an ergonomics program, the potential increase in workers' compensation premiums, the cost of hazard controls, and ongoing program costs.<sup>31</sup> In all, PP&E estimates that the the proposed rule could cost anywhere from \$7 billion to \$42 billion.<sup>32</sup> As to the benefits of the proposed rule, whereas OSHA estimates that each MSD

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<sup>29</sup>NPRM, p. 66002.

<sup>30</sup>PP&E, p. 9.

<sup>31</sup>PP&E, pp. 13-20.

<sup>32</sup>PP&E, p. 47. PP&E estimates that the rule's costs could be "anywhere from 2.5 to 15 times higher" than the \$2.8 billion estimate in OSHA's draft ergonomics standard.

avoided saves \$22,546, PP&E estimates that each avoided MSD saves only \$3,120.<sup>33</sup> If PP&E's savings estimate is correct, then the economic benefit of the rule apparently drops to \$1.2 billion -- substantially less than the \$3.4 billion OSHA estimates the rule will cost.

If the PP&E cost-benefit analysis commissioned by SBA is even remotely in the ballpark, OSHA should immediately withdraw the proposed ergonomics rule, since its costs far exceed its benefits.

### ***Small Business Impacts***

OSHA conducted an "Initial Regulatory Flexibility Analysis" to determine if, in any affected sector, the impact of the annualized compliance costs exceed 1 percent of revenues or 5 percent of profits for a substantial number of small businesses. OSHA found, "In almost half of all industry sectors, costs exceed 5 percent of profits for very small affected establishments," i.e., businesses with fewer than 20 employees.<sup>34</sup> OSHA considers this an acceptable price to pay for a national ergonomics program. Many small business employers and employees may think otherwise, especially since, according to OSHA's own estimates, thousands of small businesses will have to spend 10 percent or more of their profits to comply with the proposed rule. I believe 10 percent of profits is too high a tax to levy on small businesses, given the questionable benefits employees and employers will derive from this rule.

The table below is based on OSHA's TABLE VIII-6, "Estimated Economic Impact of the Proposed Ergonomics Standard on All Very Small Firms and All Very Small Affected Firms (Those with MSDs)."<sup>35</sup> The following types of small businesses will have compliance costs equal to or exceeding 10 percent of profits:

<u>Industry</u>	<u>Annualized Costs as a Percent of Profits</u>	<u>Industry</u>	<u>Annualized Costs as a Percent of Profits</u>
Men's & boys' clothing stores	114.7	Misc. trans. services	20.5
Misc. primary metals products	47.4	Pottery & related products	20.3
Candy, nut & confectionery stores	27.4	Dairy product stores	20.1
Residential care	26.1	Children's & infants' wear stores	20.1
Leather goods n.e.c.	25.1	Narrow fabric mills	20.0
Bakery products	23.5	Ship, boat bldg & repair	18.3
Pub. bldg. & related furn.	20.7	Paint, glass, wallpaper stores	18.2

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<sup>33</sup>PP&E, p. 39.

<sup>34</sup>NPRM, p. 66019.

<sup>35</sup>NPRM, pp. 66027-66034.

Child day care services	17.4	Blankbooks & bookbinding	12.7
Grocery stores	17.4	Aircraft & parts	12.3
Fuel dealers	17.0	Women's and misses' outerwear	12.3
Misc. personal services	16.9	Watch & jewelry repair	12.3
Refrig. & serv. Indust mach	16.4	Fish hatcheries	12.1
Retail bakeries	16.3	Misc. wood products	12.1
Leather tan & finishing	16.2	Services to buildings	12.0
Household furniture	15.9	Bowling centers	11.9
Electrical repair shops	15.6	Prod. of purchased glass	11.9
Laundry & garment services	15.6	Local & suburban trans	11.7
Family clothing stores	15.6	Eating & drinking places	11.6
Meat & fish markets	15.4	Misc. recreation centers	11.6
Partitioners & fixtures	15.1	Variety stores	11.5
Tex. finishing except wool	15.0	Auto & home supply stores	11.5
Dance studios & schools	15.0	Office furniture	11.5
Oil & gas field services	14.5	Fab. rubber prdcts n.e.c.	11.4
Motorcycles & bicycles	14.5	Retail stores n.e.c.	11.4
Musical instruments	14.4	Household appliances	11.4
Misc. apparel & accessories	14.2	Landscape & hort. services	11.3
Flat glass	14.2	Screw machine prodcts	11.3
Barber shops	13.9	Misc. fab metal prodcts	11.1
Misc. fab. textile prdcts.	13.7	Trucking terminal fac.	11.1
Nonfer. founders (casting)	13.6	Cut stone & stone prodcts	11.1
Misc. apparel stores	13.6	Individual & family services	11.0
Fruit & vegetable markets	13.5	Nursing & personal care fac.	11.0
Rubber & plastics footwear	13.4	Millwork & plywood	10.9
Home health care services	13.1	Beauty shops	10.9
Printing trade services	12.9	Nonstore retailers	10.8
Footwear except rubber	12.9	Industrial mach. n.e.c.	10.7
School buses	12.9	Wood containers	10.5
Job training & related services	12.8	Bus charter service	10.4
Misc. gen. merchandise str.	12.8	Toys & sporting goods	10.1
Broadwoven fabric mills	12.8	Misc. furniture & fixtures	10.0
Radio & tv broadcasting	12.7	Animal serv. except vet.	10.0

These profit impacts are not trivial. Indeed, the cost to men's & boys' clothing stores is 114.7 percent of profits. The cost to manufacturers of primary metal products is 47.4 percent of profits. The cost to ten other types of small business equals or exceeds 20 percent of profits. Such firms and, perhaps, many others listed above, may be forced to cut back on bonuses, wages, new hires, equipment purchases, health insurance coverage, or retirement benefits. The substantial profit impacts of the proposed rule could also become a barrier to entry, deterring the formation of new small businesses. OSHA should explain in its final regulatory impact analysis and its final regulatory flexibility analysis why it believes these profit impacts do not impose a significant and unreasonable burden on small business. OSHA should also respond in detail to PP&E's cost-benefit analysis of the proposed rule.

### **III. Questions Regarding OSHA's Rejection of Less-Costly Alternatives**

Several of the alternatives rejected by OSHA are less costly and should be reconsidered. Below I review OSHA's reasons for rejecting five such alternatives. (For clarity, I use the same numbers for the alternatives as appear in the NPRM.)

#### ***Alternative 1: No Rule: Continue To Rely Only on Existing OSHA Programs and Policies.***

OSHA rejects the "No Rule" alternative, believing that not enough employers will fix jobs with ergonomic hazards.<sup>36</sup> As noted above, OSHA's impatience with market outcomes is unjustified, and the costs of the rule may well far outweigh the benefits.

OSHA implies that there are no reasonable economic grounds for firms not to implement an ergonomics program; hence, OSHA must force them to act in their own interest: "Firms that have begun to implement ergonomics programs cannot be distinguished by industry, SIC code, or other obvious factor from those that have not done so, i.e., some firms have implemented such programs, while other firms that face similar musculoskeletal problems and belong to the same industry have not."<sup>37</sup>

However, as we have seen, OSHA's data show that a much larger percentage of big business establishments than small business establishments have ergonomics programs. Curiously, OSHA admits that ergonomics programs may not be a good investment for small businesses: "OSHA does not agree that cost effectiveness represents a sufficient motive for many small businesses to implement ergonomics programs," in part because ergonomic interventions do not significantly lower small business workers' compensation costs.<sup>38</sup> Yet, in contradiction to

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<sup>36</sup>NPRM, p. 66043.

<sup>37</sup>NPRM, p. 66043.

<sup>38</sup>NPRM, p. 66044.

this argument, and on the same page, OSHA says that small business' reluctance to implement ergonomics programs is "unfortunate, because ergonomics programs are one of the best ways to lower workers' compensation costs for small businesses over the long run."<sup>39</sup> OSHA's rejection of the "No Rule" alternative is muddled and contradictory.<sup>40</sup>

***Alternative 2: Eliminate the Basic Program Requirement for Employees in Manufacturing or Manual Handling.***

OSHA rejects this alternative by arguing, in effect, that an ounce of prevention is worth a pound of cure: "Even in the absence of a full ergonomics program, the early and complete reporting of MSDs can actually serve to lower the costs of MSDs, because early reporting means that simple corrective action may take care of the problem and avoid lost work time. Many employers and insurers feel that awareness and MSD management alone can significantly reduce the costs of MSDs."<sup>41</sup> But, again, if MSD management is so cost effective, and "many employers and insurers" believe so, then why not let the marketplace, labor-management negotiations, and OSHA outreach spread the gospel of ergonomics?

The PP&E study found that "injury and illness rates for the vast majority of small businesses in the manufacturing industry are similar to (or even lower than) the incidence rates in trade and service industries." Specifically, 75 percent of manufacturing establishments with fewer than 11 employees, 50 percent of those with 11-50 employees, and 25 percent of those with 50-249 employees will experience almost no MSD incidents in six years. For such firms, investing in the Basic Program would be a sheer waste of resources. Consequently, PP&E recommends that small business manufacturers be exempted from the Basic Program.<sup>42</sup> This seems eminently sensible to me.

***Alternative 6: Use a Trigger of Two MSDs per Establishment.***

Under this alternative, a company would not have to implement the Full ergonomics program (including workplace controls and work restriction protections) until two MSDs occurred. OSHA rejects this alternative, arguing that it "would have little effect on larger firms.

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<sup>39</sup>NPRM, p. 66044.

<sup>40</sup>Consider also NPRM, p. 66010: "OSHA's 1993 ergonomics survey of general industry employers found that 30 percent of those employers who had implemented ergonomics controls reported that their ergonomics programs had had measurable positive impacts on productivity." This implies that 70 percent of employers surveyed did not report measurable impacts on productivity.

<sup>41</sup>NPRM, p. 66044.

<sup>42</sup>PP&E, pp. 25-26.

Indeed, the typical establishment with more than 100 employees and typical rates of MSDs for either controlled or uncontrolled jobs can expect to have two MSDs every year and would thus, under the two-MSD trigger, need a full program.”<sup>43</sup> But this means that, as far as large firms are concerned, there is no harm in using a two-MSD trigger. On the other hand, a two-MSD trigger would help ensure that the Full ergonomics program responds to systemic problems, rather than isolated incidents.<sup>44</sup>

OSHA complains that, for smaller establishments, a two-MSD trigger “would greatly extend the time necessary to ensure that uncontrolled jobs are controlled. For a five-employee establishment, the requirement for a two-MSD per establishment trigger would mean that it would be 30 years before 50% of such establishments would have controlled any jobs.”<sup>45</sup> This comment betrays a falsely static conception of the marketplace. Few five-employee firms last 30 years, and few 30 year-old-firms of any size have their original workforce. Therefore, the notion that a two-MSD trigger would somehow cut off millions of people from ergonomic protections for decades at a stretch is preposterous. Furthermore, if OSHA is right about the cost-effectiveness of ergonomic controls, how likely is it that a small firm will not voluntarily institute such controls in 30 years?

***Alternative 7: Use a Trigger of Two Covered MSDs in the Same Job Within One Year.***

OSHA complains, “If this trigger were adopted, it would be 95 years before 50% of all typical uncontrolled jobs (where “typical” is defined as a job with a 5% MSD rate and three persons in the job) were controlled, and 325 years before 90% of such jobs were controlled.”<sup>46</sup> This statement borders on the frivolous. It implies that business practices are frozen in time -- as if OSHA has the foresight or ability to prevent injuries 95 or even 325 years into the future! Nobody today can imagine the workplace of 2095, much less that of 2325. In all likelihood, the issues addressed by modern ergonomists will be about as relevant to the workplace of 2095 as steam-engine and horse-and-buggy hazards are to managers and engineers today.

***Alternative 19: Exempt Small Businesses in General Industry.***

According to OSHA, “This option is not one that the OSH Act permits OSHA to consider; the Act requires the Agency to protect employees exposed to significant risk to the extent feasible. OSHA’s data indicate that there is a significant risk of job-related MSDs even in

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<sup>43</sup>NRPM, p. 66045.

<sup>44</sup>PP&E, p. 31.

<sup>45</sup>NPRM, p. 66045.

<sup>46</sup>NPRM, p. 66046.

very small general industry firms.”<sup>47</sup> There are differences of opinion concerning what the OSH Act requires. Congress wrote and enacted the OSH Act, yet Congress in Fiscal Years (FYs) 1995 and 1996 enacted appropriation bill riders forbidding OSHA to develop an ergonomics rule. Even if OSHA’s reading of the OSH Act is correct, OSHA would still have the authority to exempt low-risk businesses from the standard.<sup>48</sup> NIOSH data shows that manufacturing firms have significantly lower MSD rates than manual handling firms.<sup>49</sup>

#### IV. Recommendations

In this section, I present four options for OSHA’s consideration. My strong preference is for Option 1. If, however, OSHA insists on pursuing a regulatory approach, I recommend that OSHA adopt Options 2-4.

***Option 1. OSHA should pursue incentive-based, non-regulatory approaches (a variation on Alternative 1).***

OSHA’s 1993 survey showed that 50 percent of general industry employees worked in establishments that have ergonomics programs.<sup>50</sup> Given the recent vintage of ergonomics as a discipline, the fact that one out of every two general industry employees is covered by an ergonomic program is nothing short of remarkable. OSHA’s data point to widespread market success, not significant market failure. Moreover, there is no reason to doubt -- and every reason to expect -- that economic and technological progress will continue to reduce the intensity and quantity of human physical exertion required for production and exchange. Therefore, it is likely that many of today’s MSD risk factors will be less potent or absent in the workplace of tomorrow.

Instead of any regulatory action, OSHA should develop incentive-based policies to reduce the costs of implementing voluntary ergonomics programs. OSHA believes that engineering solutions -- redesign of workstations and equipment -- are the most effective way to control ergonomic risk factors. Accordingly, OSHA should develop proposals for accelerated depreciation or, better still, full expensing of equipment and engineering investments designed to eliminate or reduce MSD hazards in the workplace.

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<sup>47</sup>NPRM, p. 66049.

<sup>48</sup>NPRM, p. 65979: “The Supreme Court has said that OSHA may promulgate a standard only if it makes a threshold finding that it is at least more likely than not that the risk OSHA seeks to regulate is ‘significant’ and that the change in practices required by the standard would reduce or eliminate that risk. *Benzene*, 448 U.S. at 642.”

<sup>49</sup>PP&E, p. 23.

<sup>50</sup>NRPM, p. 66001.



***2. If OSHA insists on pursuing a regulatory approach, it should exempt small manufacturing business from the Basic Program (a variation on Alternatives 2 and 19).***

The costs of OSHA's chosen alternative may well exceed the benefits, especially for manufacturing establishments and small business. Even under its own reading of the OSH Act, OSHA may promulgate standards sequentially, focusing on different industry sectors at different times. For example, the proposed rule does not cover the agriculture, construction, and maritime industries.<sup>51</sup> Therefore, OSHA should also exempt small business manufacturers from the Basic requirements of the proposed rule.

***3. If OSHA insists on pursuing a regulatory approach, it should set two or more MSDs as the "trigger" for requiring the Full Program (a variation on Alternatives 6-9).***

A single MSD may be the result of factors outside an employer's control. Multiple MSDs are more likely to indicate an ongoing or systemic problem. Under a multiple MSD trigger, large establishments could not escape the requirements of the Full Program. However, small firms would not be compelled to implement the Full Program due to an isolated incident.

***4. If OSHA insists on pursuing a regulatory approach, it should delay the effective date for current and new small businesses (a variation on Alternative 21).***

OSHA says that it "may ... consider delaying the compliance date or otherwise modifying certain provisions for very small firms."<sup>52</sup> OSHA should delay the effective date for small businesses on an ongoing basis, so that new, as well as existing, small businesses may enjoy the flexibility provided by the delay. For example, assume the rule is adopted in 2000 with a five-year delay for small businesses. Small firms that already exist in 2000 will not be subject to the rule's requirements until 2005. By the same token, small firms created in 2005 should not be subject to the rule's requirements until 2010. An ongoing delay of this sort is essential if the rule is not to deter small business formation and function as a barrier to entry.

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<sup>51</sup>NPRM, pp. 65786-65787.

<sup>52</sup>NRPM, p. 66049.

Thank you for thoughtfully considering my comments. I look forward to a full response to them in the final preamble, if indeed OSHA issues a final rule.

Sincerely,

A handwritten signature in black ink that reads "David McIntosh". The signature is fluid and cursive, with the first name "David" and last name "McIntosh" clearly legible.

David M. McIntosh

Chairman

Subcommittee on National Economic Growth,  
Natural Resources, and Regulatory Affairs

cc: The Honorable Dan Burton  
The Honorable Dennis Kucinich